Mine Countermeasures Unmanned Ground Vehicle (UGV) Mine Detector

Purpose: To develop and demonstrate a capability for the Marine Corps in route detection and marking of buried land mines.

Background: The Marine Corps Warfighting Lab (MCWL) is evaluating and experimenting with the current state-of-the-art technologies in route detection of buried mines. The objective of this effort is to leverage ongoing Army developments to develop and demonstrate a capability for the Marine Corps in route detection and marking of buried land mines. The U.S. Army has at least two distinct ongoing initiatives; Force Protection Demining System (FPDS) and Ground Standoff Mine Detection System (GSTAMIDS). The FPDS is being developed by the Humanitarian De-mining group at the Night Vision and Electronic Sensors Directorate (NVESD). GSTAMIDS is a program of record with requirements tied to Future Combat Systems (FCS).

Description: Efforts within this task include coordination and communication with the GSTAMIDS and FPDS programs to monitor their progress and technical results. Initially, the main thrust of this initiative will consist of frequent visits to Fort AP Hill, VA, Fort Belvoir, VA, and South Royalton, VT to witness GSTAMIDS and FPDS testing. Panama City will coordinate dedicated Marine Corps testing of the FPDS system. The FPDS consists of a host unmanned ground vehicle platform, a ground penetrating radar, and an electromagnetic metal detector array. The FPDS project is also developing marking and neutralization capabilities that the Marine Corps may be able to leverage. Multiple propellant torches, emplaced by a robotic arm attachment to the UGV, appears to be promising neutralization capability.

Deliverable Products: Reports and fieldable prototypes.

Milestones:

TASK	FY06	FY07	FY08
Monitor US Army Progress	▲——▲		
Design/Build Sensors		▲——▲	
System Integration		▲——▲	
Experimentation		▲	

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